



Bathing water results 2012 – The United Kingdom

1. Reporting and assessment

In 2012 the United Kingdom authorities reported under Directive 2006/7/EC provisions a list of their bathing waters, start and end of bathing season for each bathing water, short term pollution events, events impacting bathing water quality and measured values of concentrations of two microbiological parameters — intestinal enterococci and *Escherichia coli* (also known as *E. coli*). This report gives a general overview of bathing water quality in the United Kingdom for the 2012 bathing season.

The Annex IV of the new Directive requires a sample to be taken shortly before the start of the bathing season. Sampling dates are to be distributed throughout the bathing season, with the interval between sampling dates never exceeding one month. Taking into account one pre-season sample, no fewer than four samples are to be taken and analysed per bathing season. Three samples need be taken and analysed per bathing season in the case of a bathing water that either has a bathing season not exceeding eight weeks or is situated in a region subject to special geographical constraints. The result of such monitoring is used to build up the sets of bathing water quality data. Before the necessary data set for assessment of bathing water quality under the Directive 2006/7/EC is compiled (data for four consecutive years) the rules for transition period assessment are applied. This means that the classification of bathing waters is defined on the basis of concentrations of intestinal enterococci and *Escherichia coli* that are reported under the Directive 2006/7/EC in 2012.

Bathing water quality in 2012 season in the United Kingdom is assessed under the transition period rules, where the new Directive monitoring frequency requirements should be fulfilled. One pre-season sample should be available and the interval between sampling dates in 2012 should never exceed 35 days, provided that the next sampling is done according to the monitoring calendar.

The limit values for the classification are taken from the Directive 76/160/EEC. For the conversion of reported parameters under the Directive 2006/7/EC, Article 13.3 of the Directive 2006/7/EC foresees that the parameter *Escherichia coli*, reported under the Directive 2006/7/EC, is assumed to be equivalent to the parameter faecal coliforms of the Directive 76/160/EEC. The parameter intestinal enterococci reported under the Directive 2006/7/EC is assumed to be equivalent to the parameter faecal streptococci.

The results are classified in the following categories:

- **Class CI:** Compliant with the mandatory value of the Directive 76/160/EEC for *Escherichia coli* and not compliant with the guide values of the Directive 76/160/EEC for *Escherichia coli* or intestinal enterococci;
- **Class CG:** Compliant with the mandatory value of the Directive 76/160/EEC for *Escherichia coli* and the more stringent guide values for the *Escherichia coli* and intestinal enterococci;
- **Class NC:** Not compliant with the mandatory value of the Directive 76/160/EEC for *Escherichia coli*;
- **Class B:** Banned or closed;
- **Class NF:** Insufficiently sampled;
- **Class NS:** Not sampled.

2. Length of bathing season and number of bathing waters

For all bathing waters the season started on 15 May or 1 June and ended on 15 or 30 September 2012. In Gibraltar, the season started on 15 April and ended on 30 October.

A total of 629 bathing waters were reported in the United Kingdom during the 2012 bathing season, of which 617 were coastal (536) or transitional bathing waters (81) and 12 were inland bathing waters (0 on rivers; 12 on lakes). The number of inland bathing waters is very low compared to the coastal bathing waters reported because there is a tradition in the UK of swimming in the sea. Two coastal and no

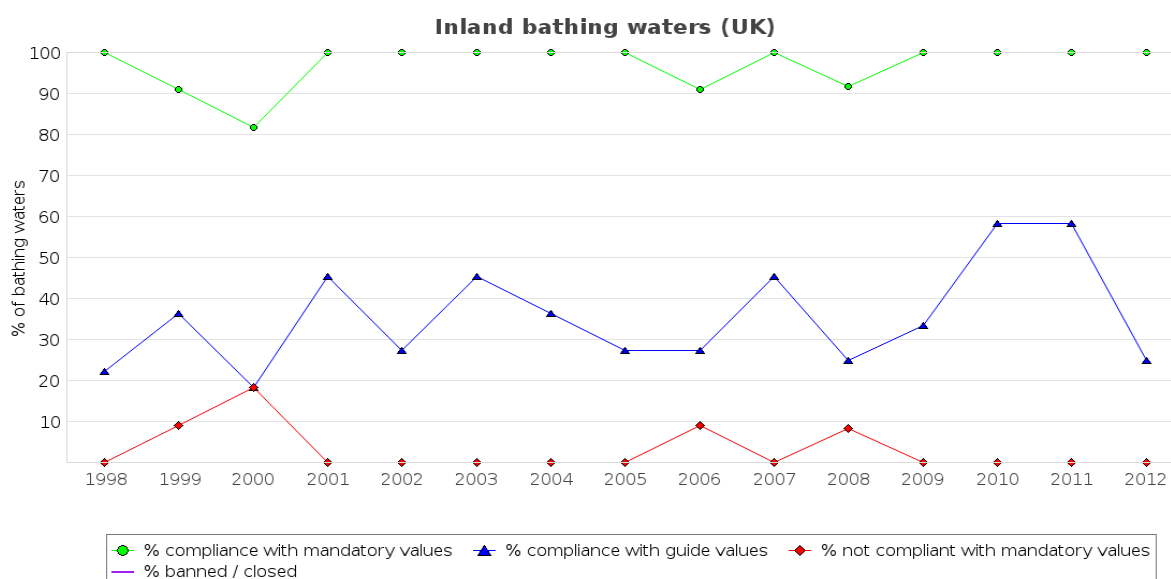
inland bathing waters were reported as de-listed (permanently closed). A total of 14 coastal and no inland bathing waters were added to the list.

With 629 reported bathing waters the United Kingdom accounts for about 2.9 % of the reported bathing waters of the European Union.

3. Bathing water quality

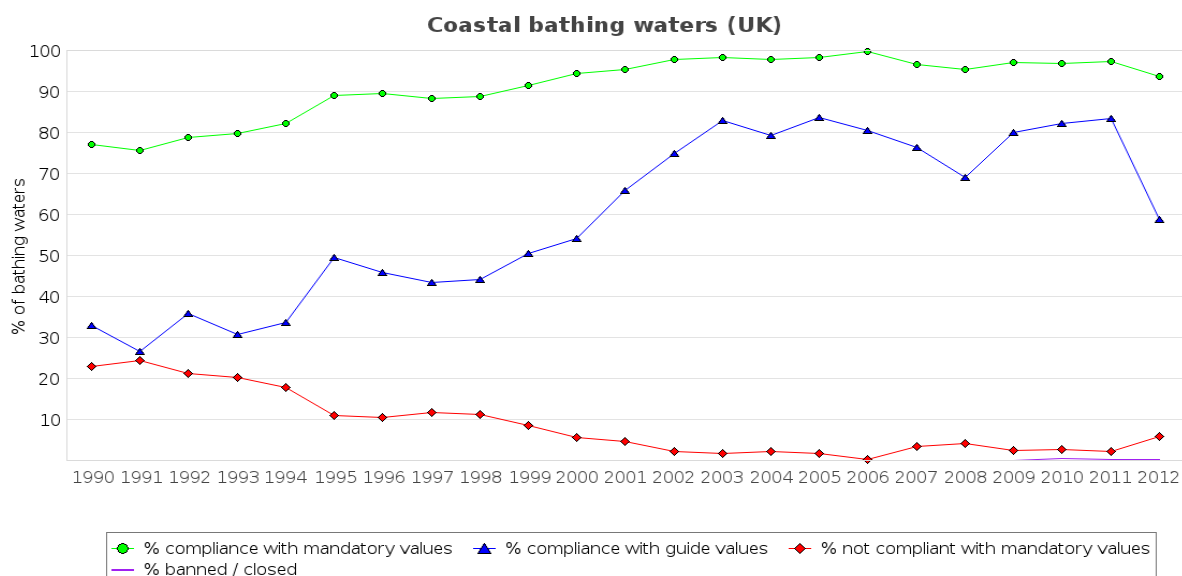
The results of the bathing water quality in the United Kingdom for the period 1990-2012 are presented in Figure 1¹. The previous reports are available on the European Commission's bathing water quality website (http://ec.europa.eu/environment/water/water-bathing/index_en.html) and the European Environment Agency's bathing water website (<http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water>).

Figure 1: Results of bathing water quality in the United Kingdom from 1990 to 2012.



¹ The graphs show, for coastal and inland bathing waters separately:

- The percentage of bathing waters that comply with the guide values (class CG, blue line);
- The percentage of bathing waters that comply with the mandatory values (class CI, green line);
- The percentage of bathing waters that do not comply with the mandatory values (class NC, red line);
- The percentage of bathing waters that are banned or closed (class B, violet line).



Note: Data until 2008 are available in the previous reports at http://ec.europa.eu/environment/water/water-bathing/index_en.html.

Table 1 shows the same information in absolute numbers and in percentages separately for inland and coastal and all bathing waters from 2008 on. The numbers and percentages of insufficiently sampled or not sampled bathing waters are also presented. A map given in Appendix 1 shows the location and quality of the bathing waters.

Coastal bathing waters

In the United Kingdom, 93.7 % of coastal bathing waters met the mandatory water quality in 2012. This is a decrease of 3.7 % compared to the previous year. The rate of compliance with the guide values decreased from 83.3 % to 58.8 %. A total of 36 bathing waters (5.8 %) were non-compliant with the mandatory value for *Escherichia coli* compared to 14 in 2011, which is an increase of 3.5 %. Access to one bathing water (0.2 %) was not possible therefore it was classified as closed during the bathing season 2012. In 2011 there were two (0.3 %) closed bathing waters because of the same reason.

Inland bathing waters

All inland bathing waters met the mandatory water quality in 2012 as in the previous year. The rate of compliance with the guide values decreased from 58.3 % to 25.0 %. No bathing waters were classified as closed in 2011 and 2012 bathing seasons.

Table 1: Results of bathing water quality in the United Kingdom from 2008 to 2012

UK												
		Total number of bathing waters	Compliance with guide and mandatory values*		Compliance with mandatory values		Not compliant		Banned/closed		Insufficiently sampled or not sampled	
			number	%	number	%	number	%	number	%	number	%
Coastal bathing waters	2008	596	412	69.1	569	95.5	24	4.0	0	0.0	3	0.5
	2009	596	477	80.0	579	97.1	14	2.3	0	0.0	3	0.5
	2010	596	490	82.2	577	96.8	16	2.7	3	0.5	0	0.0
	2011	605	504	83.3	589	97.4	14	2.3	2	0.3	0	0.0
	2012	617	363	58.8	578	93.7	36	5.8	1	0.2	2	0.3
Inland bathing waters	2008	12	3	25.0	11	91.7	1	8.3	0	0.0	0	0.0
	2009	12	4	33.3	12	100.0	0	0.0	0	0.0	0	0.0
	2010	12	7	58.3	12	100.0	0	0.0	0	0.0	0	0.0
	2011	12	7	58.3	12	100.0	0	0.0	0	0.0	0	0.0
	2012	12	3	25.0	12	100.0	0	0.0	0	0.0	0	0.0
All bathing waters	2008	608	415	68.3	580	95.4	25	4.1	0	0.0	3	0.5
	2009	608	481	79.1	591	97.2	14	2.3	0	0.0	3	0.5
	2010	608	497	81.7	589	96.9	16	2.6	3	0.5	0	0.0
	2011	617	511	82.8	601	97.4	14	2.3	2	0.3	0	0.0
	2012	629	366	58.2	590	93.8	36	5.7	1	0.2	2	0.3

*Bathing waters which were compliant with the guide values were also compliant with the mandatory values for five parameters under the Directive 76/160/EEC (2008-2011) or the mandatory value for *Escherichia coli* (2012). In 2008 and 2009, three bathing waters were not sampled. These were all closures because of access problems and engineering work.

4. Important information as provided by the United Kingdom authorities

Generally the **bathing season** runs from 15 May to 30 September in England and Wales and from 1 June to 15 September in Scotland and Northern Ireland, but with some variations depending on geographical and climatic factors. One bathing water in England, Tunstall in the North West region, was sampled for a shorter period during 2012, between 3 July and 30 September, because of access problems during the early part of the season. In Gibraltar the bathing season generally runs from 15 April to 30 October. The Government of Gibraltar reports that the public were excluded from Western Beach until 9 June 2012 as a direct result of pollution from a storm water outfall on the Spanish side of the frontier. Investigative sampling was carried out and reporting covers the normal bathing season.

The national **mandatory limit values** are the mandatory values set in the Annex to Directive 76/160/EEC. The results for the UK are usually based on a minimum of 20 samples taken at approximately weekly intervals throughout the bathing season. Sampling has been reduced at 8 bathing sites in Scotland. Samples from Gibraltar beaches are taken on a weekly basis throughout the season.

The **competent authorities** in the UK have used the guidelines concerning sampling and sample handling, as agreed in the Bathing Water Committee. The main microbiological parameters are analysed using Membrane Filtration methods.

Bathing water quality information in the UK can be accessed through a wide range of **public information sources**, including the traditional poster scheme, which is operated at many UK bathing waters, and on the internet, where up-to-date results of samples taken in 2012 were posted on the websites of the Environment Agency for bathing waters in England and Wales (www.environment-agency.gov.uk), the Scottish Environment Protection Agency for Scotland (http://www.sepa.org.uk/water/bathing_waters.aspx) and in Northern Ireland, the Northern Ireland Environment Agency: (www.ni-environment.gov.uk/water/quality/bathingqualityni.htm). Monitoring information is also available to the public on registers held by the competent authorities and detailed summaries are published annually. In Scotland electronic signage providing real-time bathing water quality predictions is available at 23 bathing waters.

Results of bathing water sampling in Gibraltar were posted on the Environmental Agency's website (http://www.environmental-agency.gi/environmental_monitoring.htm).

The UK water industry is implementing solutions to meet the requirements of the revised Bathing Water Directive. In England and Wales, during the AMP5 period (2010-2015), a capital investment of £220m is focusing on 32 investigations covering 43 bathing waters and 102 enhancement projects impacting on bathing waters as a direct consequence of the Bathing Water Directive or the revised Bathing Water Directive. During AMP5, 19 investigations and 15 capital enhancement projects to improve **sewage treatment** works and overflows to assist compliance with EU microbiological standards have been completed (figures correct up to 31 March 2012). In addition, event duration monitors have been installed at 295 intermittent discharges that potentially impact on bathing waters. There may also be additional benefit to bathing water quality from projects funded under other directives, such as the Shellfish Waters Directive. The programme of funded enhancements includes some projects to take bathing waters beyond the minimum requirements of the revised Bathing Water Directive to ensure that water industry assets do not prevent a bathing water from obtaining "excellent" classification. In Northern Ireland, the Price Control 10 investment programme (2010-13) has resulted in infrastructure investment by Northern Ireland Water aimed at complying with bathing water standards. This included the completion of three projects at Bangor, Coleraine and Newcastle in 2012 to improve wastewater discharges impacting on bathing waters. In Scotland, the investment programme 'Quality and Standards 3' runs from 2006-15 and takes account of infrastructure investment requirements to ensure compliance with bathing water standards.

Tackling **diffuse water pollution from agriculture** is a major part of UK water quality policy and a key element of achieving the objectives of the Bathing Water Directive and Water Framework Directive. UK authorities are working with farmers and others to develop measures to reduce diffuse water pollution from agricultural and urban sources, and to provide information and advice on how to achieve this. Projects regarding diffuse water pollution are Catchment Sensitive Farming, agri-environmental schemes of Wales, Glastir, Defra funds, programme of rural diffuse pollution work in Scotland, Northern Ireland Rural Development Programme etc.

As with England and Scotland, there is on-going development of policy projects to tackle **non-agricultural diffuse water pollution** within Northern Ireland. In addition, in Northern Ireland, in support of the Nitrates Action Programme, the Phosphorus (Use in Agriculture) Regulations (Northern Ireland) 2006 limit the use of chemical phosphorus fertiliser to crop requirement.

In England and Wales policy projects to tackle non-agricultural diffuse water pollution include increasing the uptake of Sustainable Drainage Systems (SuDS). Once commenced, the provisions in Schedule 3 of the Flood and Water Management Act 2010 will, among other things, make the right to connect surface water from new developments to public sewers conditional on the drainage system being approved by the SuDS Approving Body as meeting national Standards for SuDS. It will also clarify the responsibility for maintenance of the SuDS. In Scotland it is already required by legislation that, in most circumstances, new developments must include SuDS to control surface water drainage.

Additional comments were annotated in Inventory (identified bathing waters) and Seasonal information datasheet along corresponding bathing waters. Short-term pollution events were reported for one bathing water in Gibraltar (Western Beach).

Abnormal situations datasheet states that "there were around 25 abnormal situations on bathing waters mentioned". There were in fact 9 separate pollution incidents that were classified as abnormal situations, affecting a total of 24 bathing waters (2 of which were affected by 2 separate incidents).

5. General information on bathing water quality in Europe in 2012

Out of more than 22 000 bathing areas monitored throughout Europe in 2012, around two thirds were in coastal waters and the rest were in rivers and lakes. In the 2012 bathing season, the monitoring of bathing sites has been adjusted to the provisions in the EU's new bathing water directive (Directive 2006/7/EC). The sampling of water quality in most of the bathing water sites meets the frequency standards (this involves a pre-season sample of the water quality, followed up by monthly samples thereafter). As regards assessment, the provisions in the new bathing water directive have been applied in 19 European countries (Belgium, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Germany, Greece, Hungary, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Spain, Sweden). This involved taking data from four years of monitoring to make the 2012 assessment. For the remaining ten countries, the 2012 assessment has been carried out under a set of transitional rules that do not yet meet all the requirements of the new directive using the results from the 2012 monitoring.

In 2012, the quality of 94 % of all bathing waters met at least the minimum 'mandatory' level (corresponding to a rating of sufficient quality under the new directive). Bathing water quality improved at 1.8 % of sites in 2012 compared with 2011, and at 2.5 % of sites compared with 2010. There has also been a marked decline compared with 2011 in the number of bathing waters that were closed or that prohibited bathing.

In 2012, 95.3 % of coastal bathing waters in the EU-27 achieved the minimum quality standards requested by the EU directives — an increase of 2.0 % compared with 2011. The share of coastal bathing waters with excellent quality (or complying with the guide values) in 2012 reached 81.2 % (an increase of 0.9 % from 2011).

The percentage of inland bathing waters with excellent quality is 72 % in 2012, a 1.6 % increase from 2011. In 2012, 91 % of inland bathing waters in the European Union had good or sufficient quality. This is a 1.0 % point increase from 2011. Only 2.3 % of inland bathing waters in the EU did not satisfy the minimum quality level. This is 0.1 % decrease from the previous year, continuing the slow but steady reduction in the percentage of poor quality bathing waters.

The "European bathing water quality in 2012" report presents the results and trends in bathing water quality in 2012 in Europe (<http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water>). More information on bathing water quality as prepared for all reporting countries can be found on the European Environment Agency's bathing water website. The reports for the 2012 season have been produced by TC Vode, European Topic Center ICM Waters partner with support of the

Institute for Water of the Republic of Slovenia (IWRS). Countries have collaborated in the assessment of bathing water quality and supplied additional information when needed.

6. Interactive information on bathing water quality in Europe

The bathing water section of the Water Information System for Europe (WISE), which is accessible at the EEA bathing water website (<http://www.eea.europa.eu/themes/water/status-and-monitoring/state-of-bathing-water>), allows users to view the bathing water quality at more than 22 000 coastal beaches and inland sites across Europe. Users can check bathing water quality on an interactive map, download data for a selected country or region, and make comparisons with previous years.

The Eye on Earth — Water Watch application (<http://eyeonearth.org/map/WaterWatch/>) allows users to zoom in on a section of coast, riverbank or lake, both in street map or, where available, bird's eye viewing formats.

The data on bathing water quality in 2012 and previous years can also be viewed in WISE bathing water data viewer, an application prepared by TC Vode (<http://bwd.eea.europa.eu/>).

In order to make information to the public more effective, all EU countries have national or local web portals with detailed information for each bathing water site. Websites generally include a map search function and public access to the monitoring results both in real time and for previous seasons. Citizens now have access to more bathing water information than ever, giving them the tools to become more actively involved in protecting the environment and helping to improve Europe's bathing areas.

Appendix 1

Map 1: Bathing waters reported during the 2012 bathing season in the United Kingdom



Source: National boundaries: EEA; Large rivers and lakes: EEA, WFD Article 3; Bathing waters data and coordinates: U.K. authorities